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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/736,282

12/15/2003

Hiroshi Nakahata

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EXAMINER

HAND, MELANIE JO

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/736,282	Applicant(s) NAKAHATA ET AL.	
	Examiner MELANIE J. HAND	Art Unit 3761	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 March 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 4-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on March 18, 2009 has been entered.

Response to Arguments

2. Applicant's arguments filed March 18, 2009 have been fully considered but they are not persuasive. As to the argument that Nakahata discloses several waist configurations by reference to other patents and thus does not disclose any specific structure that would lead to the extensibility control means claimed, applicant is reminded that applicant's specification does not disclose any particular materials or configurations either. In fact, applicant's disclosure sets forth very broad statements about the extensibility control means, i.e. it can be the topsheet or separate material, it can be elastic or inelastic and sets forth only broad classes of materials for the topsheet when the topsheet is acting as the extensibility control means. The prior art of Nakahata meets all of the claim limitations with the exception of discontinuities in the chassis layer; the discontinuities of Nakahata are in the topsheet, hence the introduction of

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Malowaniec as a secondary reference disclosing a material that can have discontinuities on either or both layers and either configuration yields the same result. As it is clear from applicant's specification that it is the structural relationship of the components of the diaper in relation to the extensibility control means that dictates the degree of inhibition of the chassis layer extension, rather than a simple matter of materials chosen, since Nakahata as modified by Malowaniec meets all of the structural and compositional limitations of claim 1, it is examiner's position that the article of Nakahata as modified by Malowaniec is very easily modified to arrive at the claimed inhibition of the chassis layer. This position is supported by the fact that applicant discloses only classes of materials, implying that any material within any of those classes will meet the limitation added to claim 1 regarding the magnitude of inhibition of the chassis layer.

3. As to the argument regarding a logical leap of faith being required to modify Nakahata to arrive at a tension force greater than 125 g/25 mm, it is noted that the features upon which applicant relies (i.e., a tension force of greater than or equal to 125 g/25mm) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the

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art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 1, 2 and 4-18 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for an extensibility controlling means, does not reasonably provide enablement for a specific structure or material that inhibits the chassis layer from extending beyond 20% at a tension force of 125 grams/25mm. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make the invention commensurate in scope with these claims. Applicant discloses only large classes of materials for the topsheet when it functions as the extensibility control means and elastic and inelastic materials for the means when it is not necessarily the topsheet. Further, the type of material the control means is made of and the structural relationship of the extensibility control means with the rest of the components of the article are both simultaneously responsible for the inhibition of the chassis layer. As such, one of ordinary skill in the art cannot replicate this inhibition of the chassis layer without undue experimentation with regard to materials and the nature of the control means, e.g. whether it is an elastic waist band or a topsheet or other material attached to the chassis layer.

Claim Rejections - 35 USC § 103

6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of

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the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 1, 2 and 4-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakahata (U.S. Patent No. 5,873,868) in view of Malowaniec (U.S. Patent No. 6,049,915).

With respect to **claim 1**: Nakahata discloses an absorbent article 200 having a pair of longitudinal side edges 50 and a first end edge 52, a second end edge 52, a first waist panel defining first waist region 46 adjacent to the first end edge 52, a second waist panel defining second waist region 44 adjacent to the second end edge 52, a crotch panel defining crotch region 48 positioned between the first and second waist panels, and a side panel 30 extending laterally outwardly from the first or second waist panel. (Figs. 1,2, Col. 3, lines 15-31, Col. 11, lines 1-5) The absorbent article 200 comprises a liquid pervious topsheet 202, an absorbent core 28 disposed underneath the topsheet 202, and a chassis layer in the form of backsheet 26, wherein the first or second waist panel comprises a portion of the chassis layer inasmuch as the first and second waist panels are part of the main structure of the diaper and the chassis layer comprises the main structure of the diaper. (Col. 3, lines 32-36, 45-47) The topsheet 202 includes a plurality of spaced discontinuities in the form of a pattern 204 of slits 206 regularly disposed in at least a portion of the first or second waist panel such that when the waist panel is subject to tension the discontinuities provide openings 212 that extend through the topsheet 202, thereby providing the topsheet, which is a chassis layer, with extensibility in the transverse

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direction. (Fig. 3, Col. 11, lines 5-8, 30-37). Nakahata discloses an extensibility controlling means in the form of elastic waist feature 34 to control the extensibility of the chassis layer inasmuch as elastic feature 34 is attached to the chassis layer (i.e. the elastic feature forms a portion of the end edge 52) and contracts to fit the user's waist, causing the chassis layer to follow the motion of elastic feature when the elastic feature contracts. (Col. 7, lines 60-66, Col. 8, lines 2-5) The extensibility controlling means 34 of Nakahata is an elastic material wherein the extensibility controlling means inhibits the chassis layer from extending beyond extensibility causing breakage of the chassis layer via its ability to contract when an elongating force is removed, e.g. when the controlling means 34 contracts to fit the user's waist.

Nakahata teaches that the discontinuities 206 are present in topsheet 24, which is a chassis layer, but does not teach that the discontinuities are present in a separate chassis layer 22 from the topsheet as claimed. Malowaniec teaches an absorbent article having an absorbent core in the form of elastic layer 11 disposed between topsheet 13, and a chassis layer 12. Both chassis layer 12 and topsheet 13 include a plurality of spaced discontinuities 14 regularly disposed in at least a portion of the first or second waist panel (inasmuch as the incisions occur throughout the entire layer 12) such that when the waist panel is subject to tension the discontinuities 14 provide openings that extend through the chassis layer 12. Since Malowaniec teaches that both topsheet 13 and chassis layer 12 have discontinuities that lend extensibility to the otherwise inelastic material of topsheet 13 and chassis layer 12, and extensibility provides a more comfortable fit to the wearer during use, it would be obvious to one of ordinary skill in the art to modify the article of Nakahata so as to have discontinuities located in the chassis layer instead of or in addition to the topsheet as taught by Malowaniec to provide extensibility to the chassis layer to allow a more comfortable fit to the wearer. ('915, whole document)

With regard to the limitation “wherein the extensibility controlling means inhibits the chassis layer from extending beyond 20% at a tension force of 125g/25mm”, Nakahata teaches many materials for topsheet 24 that are identical to materials disclosed by applicant for a topsheet that functions as an extensibility control means. Further, the article of Nakahata as modified by Malowaniec meets all of the structural limitations of claim 1, wherein applicant discloses that materials and structural configuration of the chassis layer relative to the rest of the diaper inhibit the chassis layer from extending beyond 20% elongation. Thus, while Nakahata is silent regarding a percentage elongation of the topsheet associated with a tension force of 125 grams/25mm, it would be obvious to one of ordinary skill in the art to modify the article of Nakahata as modified by Malowaniec such that the extensibility controlling means inhibits the chassis layer from extending beyond 20% at a tension force of 125 g/25 mm with a reasonable expectation of success to prevent breakage of the chassis layer that would impair or destroy the function of the diaper.

With respect to **claim 2**: The extensibility causing breakage of the chassis layer 26 disclosed by Nakahata is between 10-500%, which overlaps the range of more than 20 %. (Col. 13, lines 10-12)

With respect to **claim 4**: The extensibility controlling means 34 disclosed by Nakahata is disposed in the first or second waist panel 46,44 in the transverse direction across at least the transverse width of the plurality of spaced discontinuities 206. (Fig. 2, Col. 7, line 65 – Col. 8, line 9, Col. 11, lines 1-8)

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With respect to **claim 5**: The extensibility controlling means (waist feature 34) disclosed by Nakahata is present along, and thus disposed along, the end edge 52. (Col. 7, lines 59-66)

With respect to **claim 6**: The extensibility controlling means disclosed by Nakahata is a stretchable elastic material in the form of elastic waist feature 34. (Col. 7, lines 59-66)

With respect to **claim 7**: The chassis layer 22 disclosed by Nakahata comprises a liquid impervious material. (Col. 3, lines 32-35, Col. 4, lines 5-12)

With respect to **claim 8**: The absorbent article 20 disclosed by Nakahata comprises a liquid impervious sheet 26 disposed between the absorbent core and the chassis layer where the chassis layer is a holder and the diaper comprises a holder and liner wherein the liner contains the topsheet 24, backsheet 26 and core 28. (Col. 3, lines 39-43)

With respect to **claims 9,10**: Nakahata teaches that the core can be of various shapes and sizes. (Col. 7, lines 5-12) Thus while Nakahata does not explicitly teach that the absorbent core 28 does not extend into the first or second waist panel in which the discontinuities 206 are provided, it would be obvious to one of ordinary skill in the art to modify the article of Nakahata to meet this limitation, as the core is substantially inelastic and would inhibit the elasticity of the topsheet 24 and may interfere with the function of extensibility controlling means 26, which is contrary to one of the problems sought to be solved by Nakahata, i.e. to provide an elastically extensible topsheet 24.

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With respect to **claim 11**: The discontinuities 206 disclosed by Nakahata are slits. (Col. 11, lines 5-9)

With respect to **claim 12**: The discontinuities 206 disclosed by Nakahata comprise a plurality of cuts wherein the cuts comprise rectilinear cuts. (Col. 11, lines 5-9)

With respect to **claim 13**: The discontinuities 206 disclosed by Nakahata are regularly disposed as a pattern 204 in the chassis layer 22. (Col. 11, lines 1-9)

With respect to **claim 14**: The discontinuities 206 disclosed by Nakahata are oriented such that the discontinuities extend in a longitudinal direction. (Fig. 2, Col. 11, lines 9-13)

With respect to **claim 15**: The discontinuities 206 disclosed by Nakahata are aligned in the longitudinal direction in an array of columns and rows seen in Fig. 2 such that the discontinuities form a plurality of laterally spaced columns 208 as seen in Fig. 4 which extend in the longitudinal direction. (Col. 11, lines 16-21)

With respect to **claim 16**: The discontinuities 206 disclosed by Nakahata are located in the topsheet 24 which is treated to be hydrophobic and thus the discontinuities 206 comprise a plurality of edges wherein the edges are treated. (Col. 6, lines 9-12) The limitation "to strengthen the edges" constitutes functional language that is given little patentable weight herein. The combined teaching of Nakahata and Malowaniec meets all of the structural limitations of claim 16 and claim 1 from which it depends regarding the material of the chassis layer and the discontinuities, and the manner of the claimed treatment, therefore the edges of the

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discontinuities of the combined teaching of Nakahata and Malowaniec are necessarily treated in such a manner as to strengthen the edges of the instant discontinuities.

With respect to **claims 17,18**: The discontinuities 206 disclosed by Nakahata are arranged such that the application of a tensile force to the chassis layer results in a plurality of equal area openings having an area from about 1 mm² to about 2500 mm². (Col. 12, lines 16-22)

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MELANIE J. HAND whose telephone number is (571)272-6464. The examiner can normally be reached on Mon-Thurs 8:00-5:30, alternate Fridays 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tatyana Zalukaeva can be reached on 571-272-1115. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Melanie J Hand/
Examiner, Art Unit 3761